

=> FILE REG

FILE 'REGISTRY' ENTERED AT 15:54:36 ON 08 APR 2004

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STRUCTURE FILE UPDATES: 7 APR 2004 HIGHEST RN 672883-15-7

DICTIONARY FILE UPDATES: 7 APR 2004 HIGHEST RN 672883-15-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 15:54:40 ON 08 APR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 8 Apr 2004 VOL 140 ISS 15

FILE LAST UPDATED: 7 Apr 2004 (20040407/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE L7

L3 STR

```

      6      8
      G1      O
      |      |
      2      4
G1~Si~Ak~S~O
1  |  3  |  5
      |  |
      G1  O
      7      9

```

*102 structures from
this query per claim 1*

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

VAR G1=AK/CY
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L5 102 SEA FILE=REGISTRY SSS FUL L3
L6 6 SEA FILE=REGISTRY ABB=ON L5 AND (1/N OR 1/P)
L7 5 SEA FILE=HCAPLUS ABB=ON L6

*6 Compounds
with Nor
P*

=> D L7 BIB ABS HITSTR 1-5

5 CA references

L7 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:120603 HCAPLUS
DN 140:164763
TI Quaternary onium organosilicon antistatic agents and polymer compositions
derived therefrom
IN Chowdhury, Sanjoy Kumar; Hoeks, Theodorus Lambertus
PA India
SO U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

applicant

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004030015	A1	20040212	US 2002-64676	20020806
	WO 2004013218	A1	20040212	WO 2003-US19602	20030617
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI US 2002-64676 A 20020806

OS MARPAT 140:164763

AB An antistatic additive comprises a quaternary onium organosilicon compound
R₂Si(CR₃)_nSO₃-XR₁4⁺, wherein each R₁ independently comprises an aliphatic
or aromatic functional groups that may be substituted or unsubstituted; X
comprises phosphorus or nitrogen; each R₂ independently comprises an
aliphatic or aromatic functional group that may be substituted or
unsubstituted;

each R₃ independently comprises a hydrogen or an aliphatic or aromatic
functional group that may be substituted or unsubstituted; and n has a
value of about 1 to about 20. Tetrabutylammonium 3-
trimethylsilylpropanesulfonate was prepared and used in a polycarbonate
composition

IT 654646-39-6P

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(antistatic agent; quaternary onium organosilicon antistatic agents and polymer compns. derived therefrom)

RN 654646-39-6 HCAPLUS

CN Phosphonium, tetrabutyl-, salt with 3-(trimethylsilyl)-1-propanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 59906-89-7

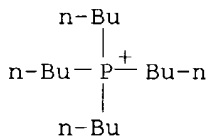
CMF C6 H15 O3 S Si

$\text{Me}_3\text{Si}^-(\text{CH}_2)_3-\text{SO}_3^-$

CM 2

CRN 15853-37-9

CMF C16 H36 P



IT **654646-38-5P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(quaternary onium organosilicon antistatic agents and polymer compns. derived therefrom)

RN 654646-38-5 HCAPLUS

CN 1-Butanaminium, N,N,N-tributyl-, salt with 3-(trimethylsilyl)-1-propanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 59906-89-7

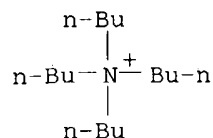
CMF C6 H15 O3 S Si

$\text{Me}_3\text{Si}^-(\text{CH}_2)_3-\text{SO}_3^-$

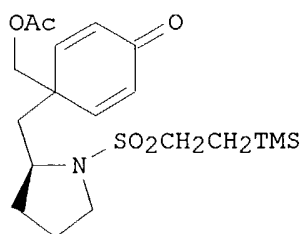
CM 2

CRN 10549-76-5

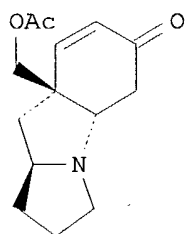
CMF C16 H36 N



L7 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1997:439255 HCAPLUS
 DN 127:161659
 TI Perhydropyrrolo[1,2-a]indole synthesis: diastereoselection in an
 intramolecular conjugate addition of an amine to a 1,4-cyclohexadienone
 AU Bland, Douglas; Hart, David J.; Lacoutiere, Stephane
 CS Department of Chemistry, The Ohio State University, Columbus, OH, 43210,
 USA
 SO Tetrahedron (1997), 53(26), 8871-8880
 CODEN: TETRAB; ISSN: 0040-4020
 PB Elsevier
 DT Journal
 LA English
 OS CASREACT 127:161659
 GI



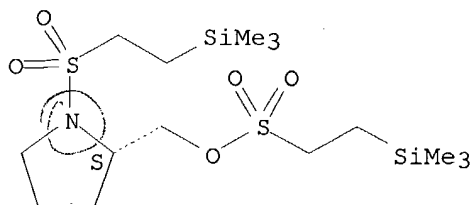
I



II

AB Cyclization of amino-cyclohexadienone I occurs with a high level of
 diastereoselection to afford perhydroindole II. The relationship of this
 observation to controlling the relative stereochem. between C34 and other
 stereogenic centers in the manzamine family of alkaloids is discussed.
 IT **193611-69-7P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (diastereoselection in intramol. conjugate addition of amine to
 cyclohexadienone to give pyrroloindole)
 RN 193611-69-7 HCAPLUS
 CN Ethanesulfonic acid, 2-(trimethylsilyl)-, [1-[[2-
 (trimethylsilyl)ethyl)sulfonyl]-2-pyrrolidinyl]methyl ester, (S)- (9CI)
 (CA INDEX NAME)

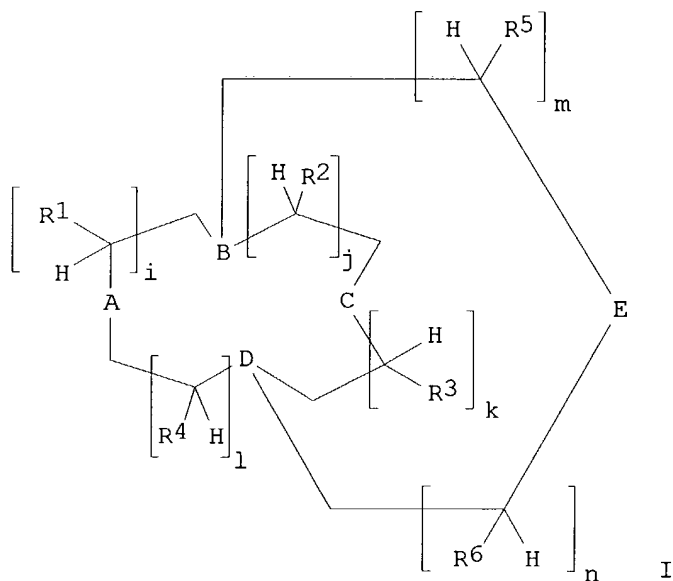
Absolute stereochemistry. Rotation (-).



RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:994164 HCAPLUS
DN 124:49697
TI Functionalized aza-bimacrocyclic ligands for imaging applications, and
preparation of ligands and chelates
IN Dunn, T. Jeffrey; Moore, Dennis A.; Wallace, Rebecca A.
PA Mallinckrodt Medical, Inc., USA
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9520353	A1	19950803	WO 1995-US1172	19950126
	W: AU, BR, CA, CZ, FI, HU, JP, MX, NO, PL, SK				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9516948	A1	19950815	AU 1995-16948	19950126
PRAI	US 1994-189018		19940128		
	WO 1995-US1172		19950126		
OS	MARPAT 124:49697				
GI					



AB Compns. comprising compds. I [A = NG, PG; B = N, P; C = NG, PG, (CH(R7))_q; D = N, P; E = NF, PF; F = (CH(R8))_pN(G)₂, (CH(R8))_pP(G)₂; G = (CH(R9))_rX, (CH(R9))_s-N(CH(R10))_tX₂; X = CO₂H, OPO₃H₂, PO₃H₂, SO₃H, SH, -OH, CONHOH; R1-R10 = H, C1-8 alkyl, C6-10 aryl, optionally substituted with ≥1 OH, C1-8 alkyl, C1-8 hydroxyalkyl, C1-8 alkoxy, C6-10 aryl, C6-10 hydroxyaryl, C6-10 aryloxy, CO₂R11, CONR12R13, NR14R15; R11-R15 = H, C1-8 alkyl, C1-8 hydroxyalkyl, C1-8 alkoxyalkyl, or R14 and R15 may form a 5- or 6-membered carbocyclic ring optionally containing singly or in combination N, O, or S; i, j, k, l, m, n, p, q, r, s, t = 0 to about 5] are disclosed, as are methods for imaging using the compns. Preparation of e.g. 4,10,15-tris(carboxymethyl)-1,4,7,10,15-pentaazabicyclo[5.5.5]heptadecane and gadolinium (III) aquo-4,10,15-tris(acetato)-1,4,7,10,15-pentaazabicyclo[5.5.5]heptadecane is included.

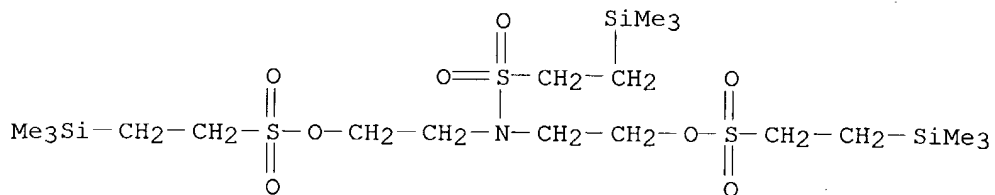
IT **172207-23-7P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

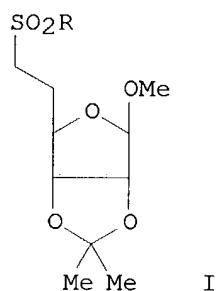
(functionalized aza-bimacrocyclic ligands for imaging applications, and preparation of ligands and chelates)

RN 172207-23-7 HCAPLUS

CN Ethanesulfonic acid, 2-(trimethylsilyl)-, [[2-(trimethylsilyl)ethyl]sulfonyl]imino]di-2,1-ethanediyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1992:470152 HCAPLUS
 DN 117:70152
 TI Facile synthesis of sulfonyl chlorides
 AU Huang, Jianxing; Widlanski, Theodore S.
 CS Dep. Chem., Indiana Univ., Bloomington, IN, 47405, USA
 SO Tetrahedron Letters (1992), 33(19), 2657-60
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 OS CASREACT 117:70152
 GI



AB A method for the synthesis of sulfonyl bromides and chlorides, e.g. I (R = Cl), from the corresponding sulfonate salts, e.g. I (R = ONBu₄), is described. The method gives good yields of the acid halides under very mild conditions, and is compatible with both acid and base sensitive functionalities.

IT **142415-51-8**

RL: RCT (Reactant); RACT (Reactant or reagent)
 (chlorination of, with thionyl chloride)

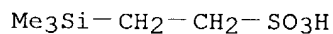
RN 142415-51-8 HCAPLUS

CN Ethanesulfonic acid, 2-(trimethylsilyl)-, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 18143-38-9

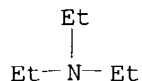
CMF C5 H14 O3 S Si



CM 2

CRN 121-44-8

CMF C6 H15 N

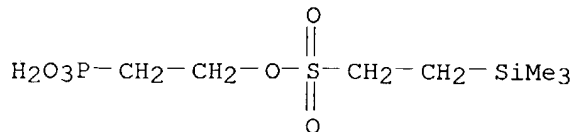


L7 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1976:116933 HCAPLUS
 DN 84:116933
 TI Sulfonyloxyethylphosphonic and thionophosphonic plant-growth regulator
 IN Takematsu, Tetsuo; Konnai, Makoto; Takeda, Makoto; Fuga, Nobuhiko; Ikeda, Kaoru; Shugaya, Kiyoshi
 PA Mitsubishi Petrochemical Co., Ltd., Japan
 SO Ger. Offen., 87 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2523458	A1	19751211	DE 1975-2523458	19750527
	JP 50154429	A2	19751212	JP 1974-59491	19740527
	JP 57019082	B4	19820420		
	JP 51079726	A2	19760712	JP 1975-847	19741230
	JP 51129765	A2	19761111	JP 1975-50649	19750428
	BR 7503307	A	19760427	BR 1975-4232	19750526
	CA 1048498	A1	19790213	CA 1975-227786	19750526
	NL 7506245	A	19751201	NL 1975-6245	19750527
	FR 2272597	A1	19751226	FR 1975-16485	19750527
PRAI	JP 1974-59491		19740527		
	JP 1975-847		19741230		
	JP 1975-50649		19750428		

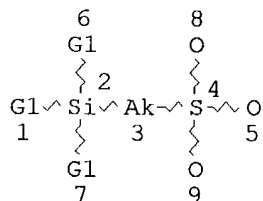
AB 2-Sulfonyloxyethylphosphonic acid derivs. $\text{R1SO}_3(\text{CH}_2)_2\text{P}(\text{O})(\text{OH})\text{OR}_2$ ($\text{R1} = \text{Me}$, Bu , Ph , benzyl , haloalkyl , substituted Pr , allyl , substituted Et , etc.; $\text{R2} = \text{H}$, Me , iso-Pr , Bu , Ph , dodecyl , chloroethyl or chlorophenyl), 2-sulfonyloxyethylthionophosphonic acid derivs. $\text{R1SO}_3(\text{CH}_2)_2\text{P}(\text{S})\text{R}_2\text{R}_3$ ($\text{R1} = \text{Me}$, p-tolyl , or 2-carboxyethyl ; $\text{R2} = \text{Cl}$, benzyloxy , benzylthio , MeO , etc.; $\text{R3} = \text{Cl}$, OH , benzyloxy , benzylthio , ethylthio , etc.), and $\text{R1SO}_3(\text{CH}_2)_2\text{P}(\text{O})\text{R}_2\text{R}_3$ ($\text{R1} = \text{Me}$, p-tolyl , p-chlorophenyl , 2-carboxyethyl , 2-methoxycarbonyl , ethyl , 2-nitroethyl , vinyl , Bu , benzyl iso-Pr , etc.; $\text{R2} = \text{SH}$, MeO , PhNH , OH , MeO , Me_2N , NH_2 , etc.; $\text{R3} = \text{SH}$, EtS , thiobenzyl , MeS , Me_2N , PhNH , NH_2 , etc.) are plant-growth regulators. Thus, 8000 ppm $\text{HO}_2\text{C}(\text{CH}_2)_2\text{SO}_3(\text{CH}_2)_2\text{P}(\text{O})(\text{OH})_2$ [58564-10-6] stimulated formation of adventitious roots in tomatoes. Syntheses and formulations of these compds. are described.

IT **58564-25-3**
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
 (plant growth regulator)
 RN 58564-25-3 HCAPLUS
 CN Ethanesulfonic acid, 2-(trimethylsilyl)-, 2-phosphonoethyl ester (9CI)
 (CA INDEX NAME)



=> D QUE

L3 STR



VAR G1=AK/CY

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L5 102 SEA FILE=REGISTRY SSS FUL L3
 L6 6 SEA FILE=REGISTRY ABB=ON L5 AND (1/N OR 1/P)
 L7 5 SEA FILE=HCAPLUS ABB=ON L6
 L8 15 SEA FILE=HCAPLUS ABB=ON L5 AND ?ONIUM?
 L9 14 SEA FILE=HCAPLUS ABB=ON L8 NOT L7

14 additional
CA references with
2 onium?

=> D L9 1-14 BIB ABS HITIND HITSTR

L9 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:643587 HCAPLUS
 DN 139:288429
 TI DSA: A new internal standard for NMR studies in aqueous solution
 AU Nowick, James S.; Khakshoor, Omid; Hashemzadeh, Mehrnoosh; Brower, Justin
 O.
 CS Department of Chemistry, University of California, Irvine, Irvine, CA,
 92697-2025, USA
 SO Organic Letters (2003), 5(19), 3511-3513
 CODEN: ORLEF7; ISSN: 1523-7060
 PB American Chemical Society
 DT Journal
 LA English
 AB The widely used internal standard for NMR studies in aqueous solution DSS
 (sodium
 4,4-dimethyl-4-silapentane-1-sulfonate) can interact with cationic
 peptides, diminishing its value for such studies. This paper introduces
 DSA (4,4-dimethyl-4-silapentane-1-**ammonium** trifluoroacetate) as

a new internal standard that does not suffer from this problem.

CC 9-5 (Biochemical Methods)

IT 2039-96-5 24493-21-8 294675-37-9 500145-06-2 500145-12-0
609816-19-5 609816-20-8 609816-21-9 609816-22-0
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(DSA internal standard for NMR studies in aqueous solution)

IT 2039-96-5
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(DSA internal standard for NMR studies in aqueous solution)

RN 2039-96-5 HCAPLUS

CN 1-Propanesulfonic acid, 3-(trimethylsilyl)-, sodium salt (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Me₃Si-(CH₂)₃-SO₃H

● Na

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:365388 HCAPLUS

DN 139:101252

TI New soluble-polymer bound ruthenium carbene catalysts: Synthesis, characterization, and application to ring-closing metathesis

AU Varray, Stephane; Lazaro, Rene; Martinez, Jean; Lamaty, Frederic

CS Laboratoire des Aminoacides Peptides et Proteines (LAPP), CNRS-Universites Montpellier, Montpellier, 34095, Fr.

SO Organometallics (2003), 22(12), 2426-2435
CODEN: ORGND7; ISSN: 0276-7333

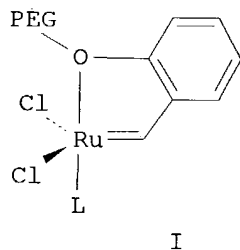
PB American Chemical Society

DT Journal

LA English

OS CASREACT 139:101252

GI



AB Exchange of benzylidene ligand of com. available Grubbs catalysts, PhCH:RuCl₂(L)(PCy₃) (L = PCy₃ 1a, H₂IMes 1b) with an appropriate soluble-polymer supported ligand leads to new boomerang type catalysts either

of the Grubbs (Cy3P)₂RuCl₂(:CHC₆H₄OPEG-4) (3) or the Hoveyda type I (L = PCy₃ 4a, H₂IMes 4b). These catalysts, supported on poly(ethylene glycol) (PEG), were fully characterized by solution NMR and MALDI mass spectrometry. They were tested in ring-closing metathesis (RCM), and ¹H NMR anal. provided key information concerning the recovery of the catalyst at the end of the reaction. While in the case of 3 the active ruthenium did not hook back to the ligand, catalysts 1 can be recovered and recycled. 4B owning a N-heterocyclic carbene ligand is particularly active and was used in the parallel synthesis of cyclic amino esters.

CC 29-13 (Organometallic and Organometalloidal Compounds)

Section cross-reference(s): 27, 67

IT 120318-54-9 90-02-8, Salicylaldehyde, reactions 106-95-6, Allyl bromide, reactions 106-96-7, Propargyl bromide 107-11-9, Allylamine 124-02-7, Diallylamine 1119-51-3, 5-Bromo-1-pentene 1458-98-6, Methallyl bromide 1779-49-3, **Triphenylmethylphosphonium** bromide 2628-17-3, 4-Vinylphenol 4224-69-5, Methyl 2-bromomethylacrylate 5162-44-7, 4-Bromo-1-butene **18143-40-3**, Sodium 2-(trimethylsilyl)ethanesulfonate 24424-99-5, tert-Butoxycarbonyl anhydride 25322-68-3, Polyethylene glycol 54149-17-6, 2-(2-Methoxyethoxy)ethyl bromide 115289-55-9 172222-30-9 246047-72-3
RL: RCT (Reactant)

(preparation, characterization, and application of new soluble-polymer bound ruthenium carbene catalysts to ring-closing metathesis of amino esters)

IT **18143-40-3**, Sodium 2-(trimethylsilyl)ethanesulfonate

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation, characterization, and application of new soluble-polymer bound ruthenium carbene catalysts to ring-closing metathesis of amino esters)

RN 18143-40-3 HCAPLUS

CN Ethanesulfonic acid, 2-(trimethylsilyl)-, sodium salt (7CI, 8CI, 9CI) (CA INDEX NAME)

Me₃Si-CH₂-CH₂-SO₃H

● Na

RE.CNT 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:159395 HCAPLUS

DN 138:378140

TI Lifetime-based optical sensor for high-level pCO₂ detection employing fluorescence resonance energy transfer

AU von Bultzingslowen, Christoph; McEvoy, Aisling K.; McDonagh, Colette; MacCraith, Brian D.

CS National Centre for Sensor Research, School of Physical Sciences, Dublin City University, Glasnevin, Dublin, Ire.

SO Analytica Chimica Acta (2003), 480(2), 275-283

CODEN: ACACAM; ISSN: 0003-2670

PB Elsevier Science B.V.

DT Journal

LA English

AB An optical sensor for the measurement of high levels of CO₂ in gas phase was developed. It is based on fluorescence resonance energy transfer

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

(FRET) between a long-lifetime Ru polypyridyl complex and the pH-active disazo dye Sudan III. The donor luminophore and the acceptor dye are both immobilized in a hydrophobic SiO₂ sol-gel/ethyl cellulose hybrid matrix material. **Tetraoctylammonium** hydroxide (TOA-OH) was used as an internal buffering system. Fluorescence lifetime is measured in the frequency domain, using low-cost phase modulation measurement technol. The use of Sudan III as an acceptor dye has enabled the sensor to have a dynamic range up to 100% CO₂. The sensor displays 11.2° phase shift between the limit of detection (LOD) of 0.06 and 100% CO₂ with a resolution of better than 2%. The encapsulation in the SiO₂/polymer hybrid material provided the sensor with good mech. and chemical stability. The effect of O₂, humidity and temperature on the sensor performance was studied.

CC 79-2 (Inorganic Analytical Chemistry)

IT 85-86-9, Sudan III **158273-63-3**

RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)

(lifetime-based optical sensor for high-level pCO₂ detection employing fluorescence resonance energy transfer between a long-lifetime Ru polypyridyl complex and Sudan III)

IT **158273-63-3**

RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)

(lifetime-based optical sensor for high-level pCO₂ detection employing fluorescence resonance energy transfer between a long-lifetime Ru polypyridyl complex and Sudan III)

RN 158273-63-3 HCAPLUS

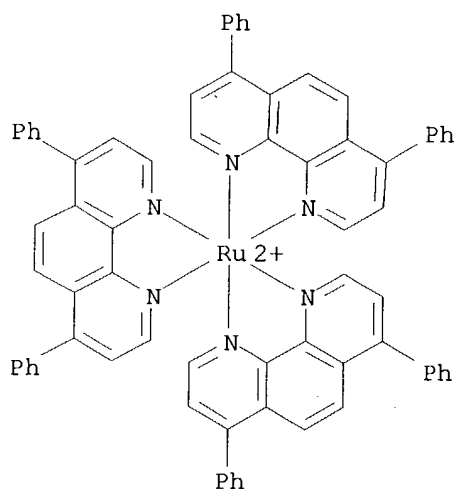
CN Ruthenium(2+), tris(4,7-diphenyl-1,10-phenanthroline-κN1,κN10)-, (OC-6-11)-, salt with 3-(trimethylsilyl)-1-propanesulfonic acid (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 63373-04-6

CMF C72 H48 N6 Ru

CCI CCS



CM 2

CRN 59906-89-7
CMF C6 H15 O3 S Si

Me₃Si-(CH₂)₃-SO₃⁻

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:896416 HCAPLUS
DN 134:147768
TI References for NMR Chemical Shift Measurements in Cyclodextrin Solutions
AU Funasaki, Noriaki; Nomura, Masao; Yamaguchi, Hiroshi; Ishikawa, Seiji;
Neya, Saburo
CS Kyoto Pharmaceutical University, Misasagi, Yamashina-ku, Kyoto, 607-8414,
Japan
SO Bulletin of the Chemical Society of Japan (2000), 73(12), 2727-2728
CODEN: BCSJA8; ISSN: 0009-2673
PB Chemical Society of Japan
DT Journal
LA English
AB Sodium methanesulfonate and sodium Me sulfate are good internal refs. for
chemical shift determination in aqueous solns. containing cyclodextrin and
anionic guests.
The chemical shift, referred to external standard and corrected by adding a
term
proportional to the cyclodextrin concentration, is in excellent agreement with
that obtained using internal standard
CC 33-4 (Carbohydrates)
Section cross-reference(s): 22
IT 67-56-1, Methanol, uses 75-57-0, **Tetramethylammonium** chloride
2039-96-5, Sodium 4,4-dimethyl-4-silapentane-1-sulfonate
14940-63-7, Deuterium hydroxide
RL: MOA (Modifier or additive use); USES (Uses)
(refs. for NMR chemical shift measurements in cyclodextrin solns.)
IT **2039-96-5**, Sodium 4,4-dimethyl-4-silapentane-1-sulfonate
RL: MOA (Modifier or additive use); USES (Uses)
(refs. for NMR chemical shift measurements in cyclodextrin solns.)
RN 2039-96-5 HCAPLUS
CN 1-Propanesulfonic acid, 3-(trimethylsilyl)-, sodium salt (6CI, 7CI, 8CI,
9CI) (CA INDEX NAME)

Me₃Si-(CH₂)₃-SO₃H

● Na

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:110523 HCAPLUS

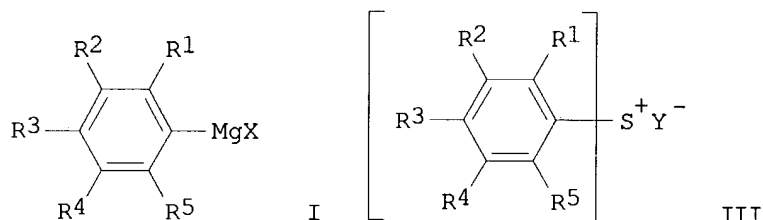
KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

DN 126:117790
 TI Preparation of **triarylsulfonium** salts
 IN Oosawa, Yoichi; Watanabe, Satoshi; Shimada, Junji; Ishihara, Toshinobu
 PA Shinetsu Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08311018	A2	19961126	JP 1996-75341	19960305
	JP 3063615	B2	20000712		
	TW 513399	B	20021211	TW 1996-85110919	19960906
PRAI	JP 1995-84773	A	19950316		
	JP 1996-75341	A	19960305		
OS	CASREACT 126:117790; MARPAT 126:117790				
GI					



AB The title compds. III [R1-5 = H, monovalent organic group; Y = (un)substituted alkylsulfonate, (un)substituted arylsulfonate, halo] are prepared by treating aryl Grignard reagents I (X = Br, Cl) with SOCl₂, then treating with R₆SiY (R₆ = monovalent organic group). A solution of 4-tert-butoxyphenyl Mg chloride in THF was treated dropwise with a solution of SOCl₂ in THF at <30°, treated for 30 min, treated dropwise with trimethylsilylfluoromethane sulfonate at <20°, treated for 1 h, then settled at room temperature over night to give 45%

trifluoromethanesulfonic
 acid tris(4-tert-butoxyphenyl)**sulfonium**.

IC ICM C07C381-12
 ICS C08F002-50

CC 25-13 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

ST aryl **sulfonium** salt prepn; Grignard reaction phenyl organosilyl sulfonate

IT Grignard reaction

(preparation of **triarylsulfonium** salts from Grignard reagents and SOCl₂ and organosilyl sulfonates)

IT 157089-24-2P 170014-77-4P 170632-63-0P 184291-55-2P 186142-86-9P
 186142-87-0P 186142-88-1P 186142-89-2P 186142-90-5P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of **triarylsulfonium** salts from Grignard reagents and SOCl₂ and organosilyl sulfonates)

IT 586-77-6, 4-Bromo-N,N-dimethylaniline 7719-09-7, Thionyl chloride
 17872-98-9, Trimethylsilyl-p-toluenesulfonate 18995-35-2 184291-69-8
186142-83-6

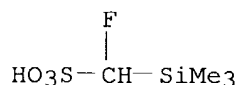
RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of **triarylsulfonium** salts from Grignard reagents and
 SOCl₂ and organosilyl sulfonates)

IT **186142-83-6**

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of **triarylsulfonium** salts from Grignard reagents and
 SOCl₂ and organosilyl sulfonates)

RN 186142-83-6 HCAPLUS

CN Methanesulfonic acid, fluoro(trimethylsilyl)- (9CI) (CA INDEX NAME)



L9 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:474767 HCAPLUS

DN 125:196030

TI A novel and general route to diverse A-ring aromatic trichothecanes via cyclobutanes

AU Nemoto, Hideo; Miyata, Junji; Fukumoto, Keiichiro

CS Pharmaceutical Inst., Tohoku Univ., Sendai, 980-77, Japan

SO Tetrahedron (1996), 52(31), 10363-10374

CODEN: TETRAB; ISSN: 0040-4020

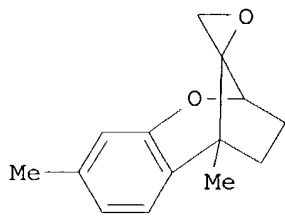
PB Elsevier

DT Journal

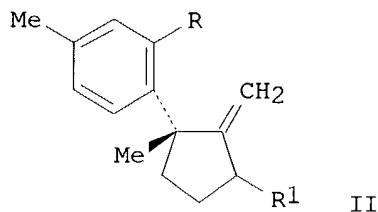
LA English

OS CASREACT 125:196030

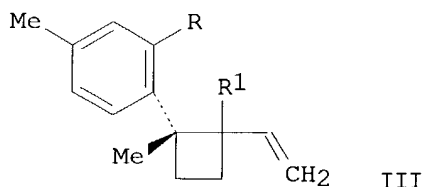
GI



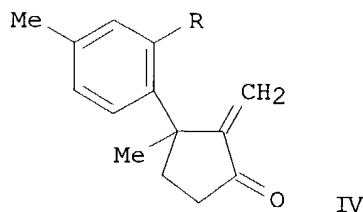
I



II



III



IV

AB A novel and generally applicable approach to A-ring aromatic trichothecane I was achieved by the regiocontrolled cyclization of II (R = OCH₂OMe, OH; R₁ = α- or β-OH) as a key step, followed by stereoselective

construction of the epoxide ring. The regiocontrolled ring expansion of the olefinic cyclobutanols III (R = OCH₂OMe, OCH₂OCH₂CH₂TMS; R₁ = α- or β-O-triethylsilyl) gave the enones IV (R = OCH₂OMe, OCH₂OCH₂CH₂TMS) which were the important intermediates in this approach.

CC 30-15 (Terpenes and Terpenoids)

IT 77-76-9, 2,2-Dimethoxypropane 107-30-2, Chloromethyl methyl ether 1826-67-1, Vinylmagnesium bromide 6921-64-8 14114-05-7, **Cyclopropyltriphenylphosphonium** bromide 76513-69-4, (2-Trimethylsilyl)ethoxymethyl chloride **93370-01-5**, Methanesulfonic acid (triethylsilyl)

RL: RCT (Reactant); RACT (Reactant or reagent)

(novel preparation of diverse A-ring aromatic trichothecanes via cyclobutanes)

IT **93370-01-5**, Methanesulfonic acid (triethylsilyl)

RL: RCT (Reactant); RACT (Reactant or reagent)

(novel preparation of diverse A-ring aromatic trichothecanes via cyclobutanes)

RN 93370-01-5 HCAPLUS

CN Methanesulfonic acid, (triethylsilyl)- (9CI) (CA INDEX NAME)

Et₃Si-CH₂-SO₃H

L9 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:620578 HCAPLUS

DN 121:220578

TI Sensor membrane of an optical sensor for the determination of a physical or chemical parameter of a sample

IN Klimant, Ingo; Wolfbeis, Otto S.; Leiner, Marco Jean Pierre; Karpf, Marco Jean Pierre; Karpf, Hellfried; Kovacs, Barna

PA AVL Medical Instruments AG, Switz.

SO Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 578630	A1	19940112	EP 1993-890131	19930630
	EP 578630	B1	19960221		
	R: AT, DE, FR, GB				
	AT 134443	E	19960315	AT 1993-890131	19930630
	JP 06174642	A2	19940624	JP 1993-169297	19930708
PRAI	AT 1992-1409		19920709		

AB In a sensor membrane containing an indicator homogeneously immobilized in a polymer matrix, comprising a cationic or anionic dye mol. and ≥1 counter ion, the counter ion is derived from a compound which contains an ionic group and (a) an oligomeric residue of the monomer forming the polymer matrix; (b) long-chain alkyl or alkylene groups; or (c) silyl groups; the counter ion has phys.-chemical properties matching those of the polymer matrix, and the dye mol. is coupled to the polymer matrix by the counter ion.

IC ICM G01N021-77

CC 79-2 (Inorganic Analytical Chemistry)

IT 89935-39-7 **158273-63-3 158273-64-4**

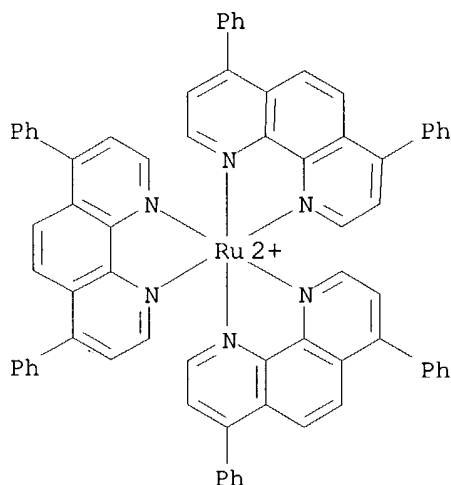
RL: ANST (Analytical study)

(indicator, membranes containing, for optical sensors)
 IT 61-73-4D, Methylene blue, complexes with alkyl- or alkylenesulfonates
 81-88-9D, Rhodamine B, functionalized with ionophors, complexes with
 alkyl- or **alkyleneammonium** 115-40-2D, Bromocresol purple,
 complexes with alkyl- or **alkyleneammonium** 130-95-0D, Quinine,
 complexes with alkyl- or alkylenesulfonates 522-75-8D, Thioindigo,
 sulfo, complexes with alkyl- or **alkyleneammonium** 1461-15-0D,
 Calcein, complexes with alkyl- or **alkyleneammonium** 2001-95-8D,
 Valinomycin, reaction product with Rhodamine B, complexes with alkyl- or
alkyleneammonium 58801-34-6D, ETH 1001, reaction product with
 Rhodamine B, complexes with alkyl- or **alkyleneammonium**
 58821-96-8D, ETH 149, reaction product with Rhodamine B, complexes with
 alkyl- or **alkyleneammonium** 61183-76-4D, ETH 227, reaction
 product with Rhodamine B, complexes with alkyl- or
alkyleneammonium 70268-36-9D, ETH 1907, reaction product with
 Rhodamine B, complexes with alkyl- or **alkyleneammonium**
 75513-72-3D, ETH 1117, reaction product with Rhodamine B, complexes with
 alkyl- or **alkyleneammonium**
 RL: ANST (Analytical study)

(indicators, membranes containing, for optical sensors)
 IT **158273-63-3 158273-64-4**
 RL: ANST (Analytical study)
 (indicator, membranes containing, for optical sensors)
 RN 158273-63-3 HCAPLUS
 CN Ruthenium(2+), tris(4,7-diphenyl-1,10-phenanthroline- κ N1, κ N10)-
 , (OC-6-11)-, salt with 3-(trimethylsilyl)-1-propanesulfonic acid (1:2)
 (9CI) (CA INDEX NAME)

CM 1

CRN 63373-04-6
 CMF C72 H48 N6 Ru
 CCI CCS



CM 2

CRN 59906-89-7

CMF C6 H15 O3 S Si

Me₃Si⁻ (CH₂)₃-SO₃⁻

RN 158273-64-4 HCAPLUS

CN Ruthenium(2+), tris(1,10-phenanthroline-N1,N10)-, (OC-6-11)-, salt with 3-(trimethylsilyl)-1-propanesulfonic acid (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 59906-89-7

CMF C6 H15 O3 S Si

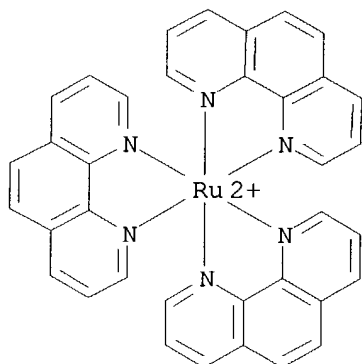
Me₃Si⁻ (CH₂)₃-SO₃⁻

CM 2

CRN 22873-66-1

CMF C36 H24 N6 Ru

CCI CCS



L9 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1990:511954 HCAPLUS
 DN 113:111954
 TI Derivatized glass supports for peptide and protein sequencing
 IN Farnsworth, Vincent
 PA Porton Instruments, Inc., USA
 SO PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9001702	A1	19900222	WO 1989-US3323	19890804
	W: AU, DK, FI, GB, JP, NO				

RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE

US 4992383	A	19910212	US 1988-228524	19880805
AU 8940523	A1	19900305	AU 1989-40523	19890804
EP 389585	A1	19901003	EP 1989-909278	19890804
EP 389585	B1	19961030		

R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE

JP 03500457	T2	19910131	JP 1989-508660	19890804
JP 2649424	B2	19970903		
AT 144841	E	19961115	AT 1989-909278	19890804
CA 1339251	A1	19970812	CA 1989-607566	19890804
US 5137765	A	19920811	US 1990-581936	19900913

PRAI US 1988-228524 19880805
WO 1989-US3323 19890804

AB Peptides or proteins are sequenced by stepwise degradation while immobilized on a glass support derivatized with a silica-binding substance bearing a free acid group, especially a sulfonic acid group. The support is preferably derivatized with 2-(4-chlorosulfonyl phenyl) Et trimethoxysilane(silyl-CSP). Peptide sequencing performance is improved if the support is also derivatized with a monomeric silica-binding substance bearing a free quaternary ammonium group, such as N-trimethoxysilyl propyl-N,N,N-trimethyl ammonium chloride (silyl-TMA). Glass fiber disks were treated with silyl-CSP in CH₂Cl₂ and then with silyl-TMA in MeOH. The hybrid CSP/TMA support was used in the sequencing of decapeptide Pro-His-Pro-Phe-His-Phe-Phe-Val-Tyr-Lys by an automated gas-phase sequencer. β-Lactoglobulin A was immobilized on a silyl-TMA support for sequencing.

IC ICM G01N033-68
ICS B32B017-06

CC 9-1 (Biochemical Methods)

IT Glass fibers, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (chlorosulfonylphenyl) Et trimethoxysilane and trimethoxysilyl Pr tri-Me ammonium chloride, peptide and protein sequencing in relation to)

IT 7803-62-5D, silane, 4-chlorosulfonylphenyl alkyl alkoxy derivs., glass reaction products 18173-90-5D, glass reaction products 35141-36-7D, glass reaction products 126519-89-9D, glass reaction products
RL: ANST (Analytical study)
(as supports for peptide and protein sequencing)

IT 18173-90-5D, glass reaction products
RL: ANST (Analytical study)
(as supports for peptide and protein sequencing)

RN 18173-90-5 HCAPLUS

CN 1-Propanesulfonic acid, 3-(trimethylsilyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)

Me₃Si-(CH₂)₃-SO₃H

L9 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:541252 HCAPLUS
DN 109:141252
TI Temperature dependence of NMR secondary references for water-d₂ and dimethyl-d₆ sulfoxide solutions
AU Hoffman, R. E.; Davies, D. B.

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

CS Dep. Chem., Birkbeck Coll., London, WC1E 7HX, UK
 SO Magnetic Resonance in Chemistry (1988), 26(6), 523-5
 CODEN: MRCHEG; ISSN: 0749-1581
 DT Journal
 LA English
 AB Chemical shifts of secondary refs. for D2O and (CD3)2SO solns. were measured as a function of temperature. The 1H and 13C chemical shifts of dioxane, sodium 4,4-dimethyl-4-silapentanesulfonate, HOD, **tetramethylammonium** chloride and sodium 3-(trimethylsilyl)propionate-d4 in D2O solution were measured relative to external TMS (Me4Si) and the chemical shifts of (CD3)2SO and H2O were measured in (CD3)2SO solution relative to internal TMS. For accurate comparison of chemical shifts it is necessary to take into account the sample temperature and, therefore, the temperature dependences of 1H and 13C chemical shifts of a number of secondary refs. were determined accurately and fitted to a parabola or straight line, as appropriate.
 CC 77-7 (Magnetic Phenomena)
 IT 75-57-0, **Tetramethylammonium** chloride 123-91-1, Dioxane, properties **2039-96-5**, Sodium 4,4-dimethyl-4-silapentanesulfonate 14940-63-7, Water-d1 24493-21-8
 RL: PRP (Properties)
 (NMR of, as secondary reference for water-d2 solns., temperature dependence of)
 IT **2039-96-5**, Sodium 4,4-dimethyl-4-silapentanesulfonate
 RL: PRP (Properties)
 (NMR of, as secondary reference for water-d2 solns., temperature dependence of)
 RN 2039-96-5 HCAPLUS
 CN 1-Propanesulfonic acid, 3-(trimethylsilyl)-, sodium salt (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Me3Si-(CH2)3-SO3H

● Na

L9 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1987:617990 HCAPLUS
 DN 107:217990
 TI Interactions between 2,2-dimethyl-2-silapentane-5-sulfonate and nucleoside 5'-monophosphates in aqueous solution
 AU Sagan, Barbara L.; Walmsley, Judith A.
 CS Dep. Chem., Univ. Toledo, Toledo, OH, 43606, USA
 SO Magnetic Resonance in Chemistry (1987), 25(3), 219-22
 CODEN: MRCHEG; ISSN: 0749-1581
 DT Journal
 LA English
 AB Hydrophobic binding of 2,2-dimethyl-2-silapentane-5-sulfonate (DSS) to GMP (5'-GMP) and CMP (5'-CMP) results in an upfield shift of the 1H NMR trimethylsilyl resonances with respect to an internal reference **tetramethylammonium** ion. The nature of the nucleotide-DSS interaction and the stability of the resulting complexes were studied. The magnitude of the effect is dependent on the nature and extent of the

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

self-association of the nucleotide and the nucleotide concentration For nucleotides

which self-associate non-cooperatively to form disordered base stacks, such as Li2(5'-GMP) and M2(5'-CMP), where M = Li+, Na+, K+ and Rb+, the formation of 2:1 complexes (nucleotide to DSS molar ratio) were proposed. For the Na+ and Rb+ salts of 5'-GMP, which form strongly associated, ordered self-aggregates, the interaction between DSS and 5'-GMP is considerably reduced owing to the inability of DSS to compete effectively with the self-aggregation process.

CC 33-9 (Carbohydrates)

Section cross-reference(s): 22

IT 18173-90-5

RL: PRP (Properties)

(interaction of, with guanosine monophosphate and cytidine monophosphate, NMR in relation to)

IT 18173-90-5

RL: PRP (Properties)

(interaction of, with guanosine monophosphate and cytidine monophosphate, NMR in relation to)

RN 18173-90-5 HCAPLUS

CN 1-Propanesulfonic acid, 3-(trimethylsilyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)

Me3Si-(CH2)3-SO3H

L9 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1984:630689 HCAPLUS

DN 101:230689

TI Esters and amides of α -trialkylsilyl-, germyl-, and stannylalkanesulfonic acids and trimethylsilyl sulfonates. Synthesis and some reactions

AU Shipov, A. G.; Baukov, Yu. I.

CS II Mosk. Med. Inst., Moscow, USSR

SO Zhurnal Obshchei Khimii (1984), 54(8), 1842-60

CODEN: ZOKHA4; ISSN: 0044-460X

DT Journal

LA Russian

OS CASREACT 101:230689

AB About 23 title alkanesulfonic esters and amides, e.g., Me3MCHRSO3Me (M = Si, Ge; R = Me, Et, Pr) and about 15 silyl sulfonates, e.g., MeSO3SiMe3, and some of their derivs. e.g., MeSO3COCF3, were prepared. Thus, treating RCH2SO3Me (R = H, Me, Et, Pr) with NaN(SiMe3)2 followed with R13MX (R1 = Me, Et; M = Si, Ge, Sn; X = Cl, Br, iodo, PhSO3) gave R13MCHRSO3Me, R13MCRMeSO3Me and (R13M)2CRSO3Me.

CC 29-8 (Organometallic and Organometalloidal Compounds)

IT 93369-71-2P 93369-78-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with halotrimethylsilane)

IT 562-98-1P 2780-75-8P 5539-53-7P 10090-05-8P 10090-06-9P

17882-06-3P 41138-92-5P 52075-19-1P 63501-74-6P

64106-98-5P 71293-94-2P 71294-00-3P 72500-12-0P

72500-13-1P 72500-14-2P 72500-15-3P 72510-47-5P

93369-65-4P 93369-66-5P 93369-67-6P 93369-68-7P

93369-69-8P 93369-70-1P 93369-72-3P

93369-73-4P 93369-74-5P 93369-75-6P **93369-76-7P**
93369-77-8P 93369-79-0P **93369-80-3P** 93369-81-4P
 93369-82-5P 93369-83-6P 93369-84-7P 93369-85-8P 93369-86-9P
 93369-87-0P 93369-88-1P 93369-89-2P 93369-90-5P 93369-91-6P
93369-92-7P 93369-93-8P **93369-94-9P** 93369-95-0P
 93369-96-1P 93369-97-2P 93369-98-3P **93370-00-4P**
93370-02-6P **93370-04-8P** **93370-06-0P**
 93370-08-2P 93370-09-3P **93370-10-6P** 93370-11-7P
93370-12-8P 93370-13-9P 93370-14-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

IT **93369-99-4** **93370-01-5** **93370-03-7**

93370-05-9 93370-07-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with **benzylisothioronium** chloride)

IT 80-18-2 **64106-98-5** **64106-99-6** 71293-94-2

72500-15-3

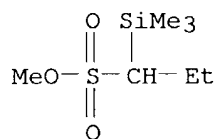
RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with halotrimethylsilane)

IT **93369-71-2P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reaction of, with halotrimethylsilane)

RN 93369-71-2 HCAPLUS

CN 1-Propanesulfonic acid, 1-(trimethylsilyl)-, methyl ester (9CI) (CA INDEX
 NAME)

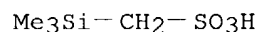


IT **63501-74-6P** **64106-98-5P** **72500-15-3P**
72510-47-5P **93369-65-4P** **93369-69-8P**
93369-72-3P **93369-73-4P** **93369-76-7P**
93369-77-8P **93369-80-3P** **93369-92-7P**
93369-94-9P **93370-00-4P** **93370-02-6P**
93370-04-8P **93370-06-0P** **93370-10-6P**
93370-12-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 63501-74-6 HCAPLUS

CN Methanesulfonic acid, (trimethylsilyl)-, sodium salt (9CI) (CA INDEX
 NAME)

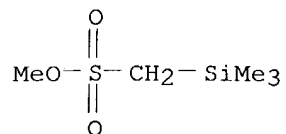


● Na

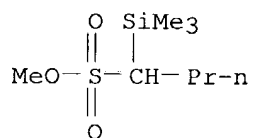
RN 64106-98-5 HCAPLUS

CN Methanesulfonic acid, (trimethylsilyl)-, methyl ester (9CI) (CA INDEX

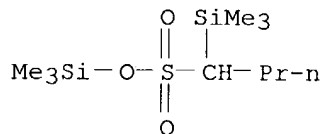
NAME)



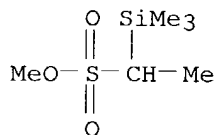
RN 72500-15-3 HCAPLUS
CN 1-Butanesulfonic acid, 1-(trimethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



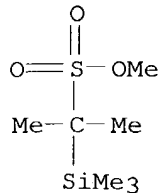
RN 72510-47-5 HCAPLUS
CN 1-Butanesulfonic acid, 1-(trimethylsilyl)-, trimethylsilyl ester (9CI) (CA INDEX NAME)



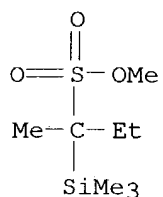
RN 93369-65-4 HCAPLUS
CN Ethanesulfonic acid, 1-(trimethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



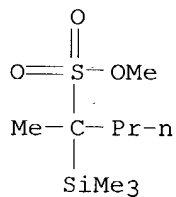
RN 93369-69-8 HCAPLUS
CN 2-Propanesulfonic acid, 2-(trimethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



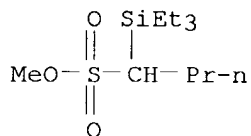
RN 93369-72-3 HCAPLUS
 CN 2-Butanesulfonic acid, 2-(trimethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



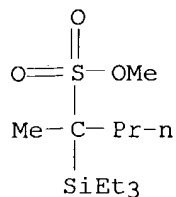
RN 93369-73-4 HCAPLUS
 CN 2-Pentanesulfonic acid, 2-(trimethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



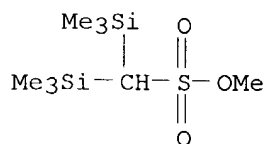
RN 93369-76-7 HCAPLUS
 CN 1-Butanesulfonic acid, 1-(triethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



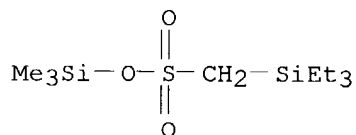
RN 93369-77-8 HCAPLUS
 CN 2-Pentanesulfonic acid, 2-(triethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



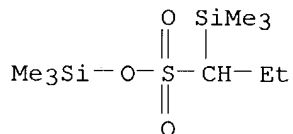
RN 93369-80-3 HCAPLUS
 CN Methanesulfonic acid, bis(trimethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 93369-92-7 HCAPLUS
 CN Methanesulfonic acid, (triethylsilyl)-, trimethylsilyl ester (9CI) (CA INDEX NAME)



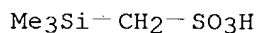
RN 93369-94-9 HCAPLUS
 CN 1-Propanesulfonic acid, 1-(trimethylsilyl)-, trimethylsilyl ester (9CI) (CA INDEX NAME)



RN 93370-00-4 HCAPLUS
 CN Methanesulfonic acid, (trimethylsilyl)-, compd. with phenylmethyl carbamimidothioate (1:1) (9CI) (CA INDEX NAME)

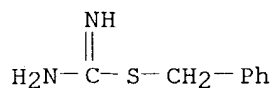
CM 1

CRN 93369-99-4
 CMF C4 H12 O3 S Si



CM 2

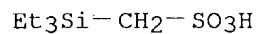
CRN 621-85-2
CMF C8 H10 N2 S



RN 93370-02-6 HCAPLUS
CN Methanesulfonic acid, (triethylsilyl)-, compd. with phenylmethyl
carbamimidothioate (1:1) (9CI) (CA INDEX NAME)

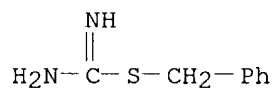
CM 1

CRN 93370-01-5
CMF C7 H18 O3 S Si



CM 2

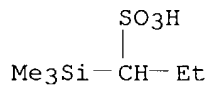
CRN 621-85-2
CMF C8 H10 N2 S



RN 93370-04-8 HCAPLUS
CN 1-Propanesulfonic acid, 1-(trimethylsilyl)-, compd. with phenylmethyl
carbamimidothioate (1:1) (9CI) (CA INDEX NAME)

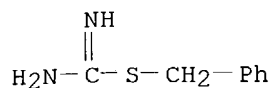
CM 1

CRN 93370-03-7
CMF C6 H16 O3 S Si



CM 2

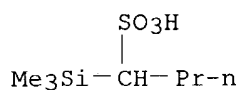
CRN 621-85-2
CMF C8 H10 N2 S



RN 93370-06-0 HCAPLUS
 CN 1-Butanesulfonic acid, 1-(trimethylsilyl)-, compd. with phenylmethyl
 carbamimidothioate (1:1) (9CI) (CA INDEX NAME)

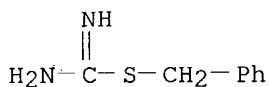
CM 1

CRN 93370-05-9
 CMF C7 H18 O3 S Si

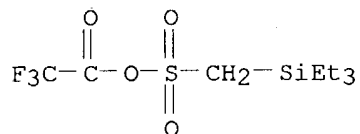


CM 2

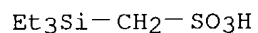
CRN 621-85-2
 CMF C8 H10 N2 S



RN 93370-10-6 HCAPLUS
 CN Acetic acid, trifluoro-, anhydride with (triethylsilyl)methanesulfonic
 acid (9CI) (CA INDEX NAME)



RN 93370-12-8 HCAPLUS
 CN Methanesulfonic acid, (triethylsilyl)-, sodium salt (9CI) (CA INDEX NAME)



● Na

IT 93369-99-4 93370-01-5 93370-03-7

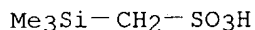
KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

93370-05-9

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **benzylisothioronium** chloride)

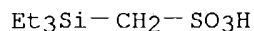
RN 93369-99-4 HCAPLUS

CN Methanesulfonic acid, (trimethylsilyl)- (9CI) (CA INDEX NAME)



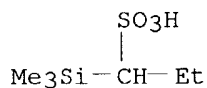
RN 93370-01-5 HCAPLUS

CN Methanesulfonic acid, (triethylsilyl)- (9CI) (CA INDEX NAME)



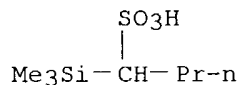
RN 93370-03-7 HCAPLUS

CN 1-Propanesulfonic acid, 1-(trimethylsilyl)- (9CI) (CA INDEX NAME)



RN 93370-05-9 HCAPLUS

CN 1-Butanesulfonic acid, 1-(trimethylsilyl)- (9CI) (CA INDEX NAME)

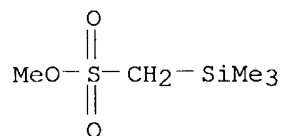


IT **64106-98-5 64106-99-6 72500-15-3**

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with halotrimethylsilane)

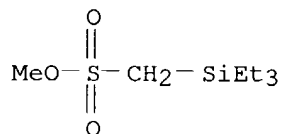
RN 64106-98-5 HCAPLUS

CN Methanesulfonic acid, (trimethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)

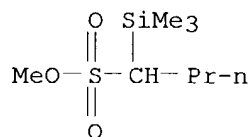


RN 64106-99-6 HCAPLUS

CN Methanesulfonic acid, (triethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 72500-15-3 HCAPLUS
CN 1-Butanesulfonic acid, 1-(trimethylsilyl)-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1975:413046 HCAPLUS
DN 83:13046
TI Siloxane surfactants as demulsifiers
AU Owen, M. J.
CS Dow Corning Ltd., Barry/Glamorgan, UK
SO Chem., Phys. Chem. Anwendungstech. Grenzflaechenaktiven Stoffe, Ber. Int. Kongr., 6th (1973), Meeting Date 11 Sep 1972-15 Sep 1972, Volume Band 3, 623-30 Publisher: Carl Hanser Verlag, Munich, Ger.
CODEN: 29ISAJ
DT Conference
LA English
AB Of 20 siloxane surfactants, which were examined as potential demulsifiers of water-in-crude oil emulsions, siloxane amine oxides, a quaternary ammonium salt, and polydimethylsiloxane-polyether block copolymers proved effective. The last class was in some cases adequate at concns. of 5-10 ppm.
CC 51-3 (Fossil Fuels, Derivatives, and Related Products)
Section cross-reference(s): 37, 46
IT 2039-96-5 18048-24-3 55510-33-3 55510-34-4 55510-35-5
55510-36-6 55510-37-7 55510-38-8 55510-39-9 55510-40-2
55510-41-3 55510-42-4
RL: USES (Uses)
(surfactants, for petroleum emulsion breaking)
IT 2039-96-5
RL: USES (Uses)
(surfactants, for petroleum emulsion breaking)
RN 2039-96-5 HCAPLUS
CN 1-Propanesulfonic acid, 3-(trimethylsilyl)-, sodium salt (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

Me₃Si-(CH₂)₃-SO₃H

● Na

L9 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1973:502257 HCAPLUS
 DN 79:102257
 TI Use of DSS [3-(trimethyl silyl)propane sulfonic acid sodium salt] as an
 internal standard in PMR studies of nucleic acid interactions
 AU Live, David H.; Chan, Sunney I.
 CS Arthur Amos Noyes Lab. Chem. Phys., California Inst. Technol., Pasadena,
 CA, USA
 SO Organic Magnetic Resonance (1973), 5(6), 275-6
 CODEN: ORMABD; ISSN: 0030-4921
 DT Journal
 LA English
 AB Two common PMR internal reference compds., DSS and 3-(trimethylsilyl) sodium
 propionate (TSP), interacted with purine in aqueous solution, causing
 significant shifts in the resonance position of their reference protons. Me₄NCl was a
 better reference compound for such studies.
 CC 9-4 (Biochemical Methods)
 Section cross-reference(s): 73
 IT Nuclear magnetic resonance
 (of nucleic acid bases, tetramethyl ammonium chloride standard
 for)
 IT 58-96-8 120-73-0
 RL: PRP (Properties)
 (NMR of, tetramethyl ammonium chloride standard for)
 IT 2039-96-5 37013-20-0
 RL: ANST (Analytical study)
 (NMR standard, for nucleic acid bases, error factors in)
 IT 2039-96-5
 RL: ANST (Analytical study)
 (NMR standard, for nucleic acid bases, error factors in)
 RN 2039-96-5 HCAPLUS
 CN 1-Propanesulfonic acid, 3-(trimethylsilyl)-, sodium salt (6CI, 7CI, 8CI,
 9CI) (CA INDEX NAME)

Me₃Si-(CH₂)₃-SO₃H

● Na

L9 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN 1964:454949 HCAPLUS
 DN 61:54949
 OREF 61:9527c-e
 TI 2,2-Dimethyl-2-silaalkanesulfonic acids and their salts

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

IN Tiers, George V.
 PA Minnesota Mining and Manufacturing Co.
 SO 2 pp.
 DT Patent
 LA Unavailable

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3141898		19640721	US	19610103

AB Compds. of the general formula $\text{Me}_3\text{SiR}\text{SO}_3\text{M}$, where R is an alkylene radical having 1 to 12 C atoms and M represents H when the compds. are sulfonic acids or a salt-forming cation such as ammonium and metallic ions when the compound is a salt. A mixture of 50 g. NaHSO_3 , 5 g. NaNO_2 , 5 g. NaNO_3 , 150 ml. distilled H_2O , 250 ml. MeOH and 25 g. allyltri-methylsilane was stirred 4 days and evaporated on a steam bath, the residue extracted 16 hrs. with absolute EtOH in a Soxhlet apparatus, and the extract cooled to give crystalline Na 2,2-dimethyl-2-silapentane-5-sulfonate monohydrate (I). Drying the monohydrate 4 hrs. in vacuo at 130° gave Na 2,2-dimethyl-2-silapentane-5-sulfonate. This product was also obtained when only distilled H_2O was employed as the solvent. The free acid could be obtained by passing a solution of 2.4 g. I in 100 ml. H_2O through a column containing 50 g. Amberlite IR-120 in the hydrogen form. These compds. provide an internal reference standard for nuclear spin resonance spectroscopy of a variety of compds. in aqueous systems. In the same way, 20 g. vinyltrimethylsilane and 20.8 g. NaHSO_3 shaken 2 days in a solution of 2.4 g. NaNO_2 and 2.4 g. NaNO_3 in 100 ml. distilled H_2O gave Na 2,2-dimethyl-2-silabutane-4-sulfonate monohydrate.

NCL 260448200

CC 39 (Organometallic and Organometalloidal Compounds)

IT 2039-96-5, 1-Propanesulfonic acid, 3-(trimethylsilyl)-, sodium salt 18143-38-9, Ethanesulfonic acid, 2-(trimethylsilyl)- 18143-40-3, Ethanesulfonic acid, 2-(trimethylsilyl)-, sodium salt 18173-90-5, 1-Propanesulfonic acid, 3-(trimethylsilyl)- (preparation of)

IT 2039-96-5, 1-Propanesulfonic acid, 3-(trimethylsilyl)-, sodium salt 18143-38-9, Ethanesulfonic acid, 2-(trimethylsilyl)- 18143-40-3, Ethanesulfonic acid, 2-(trimethylsilyl)-, sodium salt 18173-90-5, 1-Propanesulfonic acid, 3-(trimethylsilyl)- (preparation of)

RN 2039-96-5 HCAPLUS

CN 1-Propanesulfonic acid, 3-(trimethylsilyl)-, sodium salt (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

$\text{Me}_3\text{Si}-(\text{CH}_2)_3-\text{SO}_3\text{H}$

● Na

RN 18143-38-9 HCAPLUS

CN Ethanesulfonic acid, 2-(trimethylsilyl)- (7CI, 8CI) (CA INDEX NAME)

$\text{Me}_3\text{Si}-\text{CH}_2-\text{CH}_2-\text{SO}_3\text{H}$

RN 18143-40-3 HCAPLUS
CN Ethanesulfonic acid, 2-(trimethylsilyl)-, sodium salt (7CI, 8CI, 9CI) (CA
INDEX NAME)

$\text{Me}_3\text{Si}-\text{CH}_2-\text{CH}_2-\text{SO}_3\text{H}$

● Na

RN 18173-90-5 HCAPLUS
CN 1-Propanesulfonic acid, 3-(trimethylsilyl)- (7CI, 8CI, 9CI) (CA INDEX
NAME)

$\text{Me}_3\text{Si}-(\text{CH}_2)_3-\text{SO}_3\text{H}$

=>